CONTENTS OF VOLUME 24

Number 1

E. A. Marshall and W. M. Pickering	1	The computational restoration of autoradiographic images
B. P. Bergeron, L. Sato and R. L. Rouse	11	Morphing as a means of generating variation in visual medical teaching materials
E. J. Ciaccio, S. Weiner, S. S. Reisman, S. M. Dunn and M. Akay	19	Pattern recognition and interpretation of electromyogram data from cat jaw muscle
Tze-Wen Chung and E. A. O'Rear	31	A model for analyzing the formation of thrombin in vessels
A. van Rotterdam, F. W. Schultz, W. A. Hummel, J. Zoetelief, J. J. Broerse and C. Nyqvist	43	PCDOSE: an interactive software system to calculate internal radiation dose on a personal computer
A. V. Parisi and G. D. Allen	61	A computerized acquisition technique for the Wingate anaerobic test
B. Sankur, Y. P. Kahya, E. C. Güler and T. Engin	67	Comparison of AR-based algorithms for respiratory sounds classification
Software Survey Section	I	

Number 2

T. D. Lagerlund and P. A. Low	77	Mathematical modeling of hydrogen clearance blood flow measurements in peripheral nerve
P. Lánsky and V. Lánská	91	First-passage-time problem for simulated stochastic diffusion processes
M. A. Helal	103	Derivation of closed-form expression for the cerebral circulation models
E. D. Schneiderman, C. J. Kowalski, S. M. Willis and I. Y. Guo	119	A PC program for computing confidence bands for average and individual growth curves
J. M. Ribeiro, R. Fontes and A. Sillero	129	Enzyme inhibition as visualized with the reservoir model: relationships between I_{50} and inhibition constant(s) of an enzyme inhibitor
Jing Bai, Dongsheng Wu and Jupeng Zhang	145	A simulation study of external counterpulsation

B. P. Bergeron, R. S. Shiffman and R. L. Rouse 157 Data qualification: logic analysis applied toward neural network training

Announcement 165

Software Survey Section I

Number 3

G. Görög 167 An Excel program for calculating and plotting receiver-operator characteristic (ROC) curves, histograms and descriptive statistics

K. Shimomura, H. Shono, M. Kohara, A. Uchiyama, Y. Ito and H. Sugimori 171 Neonatal assessment using the Apgar fuzzy expert system

A. Gavoille, B. Bardy and A. Andremont 179 Measurement of inhibition zone diameter in disk susceptibility tests by computerized image analysis

A.-N. B. Kuhn de Chizelle and J. J. DiStefano III 189 MAMCAT: an expert system for distinguishing between mammillary and catenary compartmental models

J. C. Calvo 205 Dataload: a user-friendly program to prepare binding data for the "LIGAND" software

J. Lee 211 Comparing several proportions when the exposure variable is either ordinal or ratio which has been grouped into discrete classes

N. Fujishiro, J. Hatae and H. Kawata 221 A program for calculation of the proton activity coefficient

E. Q. Chen and C. F. Lam 229 Predictor-corrector with cubic spline method for spectrum estimation in Compton scatter correction of SPECT

Software Survey Section I

Number 4

F. Pinciroli, C. Combi and G. Pozzi 243 A database schema for public-domain medical software

O. Barnea, D. Jaron and W. P. Santamore 255 Autoregulation in the stenosed coronary circulation

R. Ball and S. L. Schwartz 269 CMATRIX: software for physiologically based pharmacokinetic modeling using a symbolic matrix representation system

H. Kessels, G. Willems and H. C. Hemker 277 Analysis of thrombin generation in plasma

M. A. Grasso and C. T. Grasso 289 Feasibility study of voice-driven data collection in animal drug toxicology studies

W. Kwok, L. Wiegand, D. S. Channin and D. A. Wiegand 295 Development of the bi-directional ultrasound system for base of tongue imaging

M. D. Orosz, N. S. Bradley and S. H. Chambers 305 Correcting two-dimensional kinematic errors for chick embryonic movements *in ovo*

P. L. Chang, Y. C. Li, C. J. Wu, M. H. Huang and P. J. Haug 315 Clinical evaluation of a renal mass diagnostic expert system

E. D. Schneiderman, S. M. Willis and C. J. Kowalski 323 A PC program for classification into one of several groups on the basis of longitudinal data

Software Survey Section I

Number 5

SPECIAL ISSUE: THE ARDEN SYNTAX

G. Hripcsak 329 The Arden Syntax for medical logic modules: introduction

G. Hripcsak 331 Writing Arden Syntax medical logic modules

R. A. Kuhn and R. S. Reider 365 A C++ framework for developing medical logic modules and an Arden Syntax compiler

R. P. Spates and K. C. Aller 371 One vendor's experience: preliminary development of a reminder system based on the Arden Syntax

P. Ludemann 377 Mid-term report on the Arden Syntax in a clinical event monitor

R. A. Jenders, M. Morgan and G. O. Barnett 385 Use of open standards to implement health maintenance guidelines in a clinical workstation

T. A. Pryor 391 The use of medical logic modules at LDS Hospital

H. Åhlfeldt, B. Johansson, R. Linnarsson and O. Wigertz 397 Experiences from the use of data-driven decision support in different environments

F. M. H. M. Dupuits 405 The use of the Arden Syntax for MLMs in HIOS+, a decision support system for general practitioners in The Netherlands

J. B. Starren, G. Hripcsak, D. Jordan, B. Allen, C. Weissman and P. D. Clayton 411 Encoding a post-operative coronary artery bypass surgery care plan in the Arden Syntax

Software Survey Section I

Number 6

M.-C. Su	419	Use of neural networks as medical diagnosis expert systems
S. K. Chittajallu and D. Wong	431	Connectionist networks in auditory system modeling
P. K. Sadasivan and D. Narayana Dutt	441	Minimization of EOG artefacts from corrupted EEG signals using a neural network approach
N. Budin and S. Abboud	451	Real-time multichannel abdominal fetal ECG monitor using digital signal coprocessor
T. B. Givens, T. J. Fischer and J. B. Callahan	463	Improvements in accuracy and reproducibility of quantitative clotting factor assays by use of a novel approach for modeling reference curves
M. Ikeda, E. Hayashi and K. Yamauchi	473	Model analysis of time duration in a medication order entry system with attention to do-medication orders
C. J. Kowalski, E. D. Schneiderman and S. M. Willis	485	PC program for assessing the relationship between rate of change and initial value
O. Sveen, K. Borthne and A. O. Aasen	493	Computer acquisition, analysis and presentation of results from a Cobas™ Bio analyser